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OFFICE OF
ENVIRONMENTAL CLEANUP

September 14, 2010

Jim Orr
Department of Environmental Quality
NW Region Cleanup Program
2020 SW 4th Ave. Suite 400
Portland, Oregon 97201

Re: 134 McCall SC Data Gaps Work Plan 8-27-2010

Dear Mr. Orr:

EPA has reviewed the above referenced Work Plan for the McCall Site for consistency with the long-term cleanup of Portland Harbor and consistency with other work being performed within the Portland Harbor Superfund site. Based on the information provided in this document, EPA provides the following comments for DEQ to consider in proceeding forward with its decisions regarding upland source control at this site.

General Comments:

Overall, the document presents a work plan consistent with DEQ's requests for additional information to fill data gaps necessary to complete the source control determination. However, EPA would like to stress the importance of following groundwater plumes from the source to the river sediments rather than ad-hoc transition zone monitoring in the river which cannot confirm nor deny the need for groundwater controls. Further, there are instances where additional clarification and information is needed by EPA. These points are provided in the specific comments below.

Specific Comments:

1. Section 2.6, top of page 5: As stated, additional Catch Basin Sediment and Storm water sampling was conducted earlier in the year to capture events at the end of the wet season. The following should be noted and/or addressed regarding these results:
   - Approval of this work plan does not constitute approval of results summarized in this separate document.
   - Because contaminants found in storm water accumulate after extended periods of dry weather, which in the Portland area typically occurs July through mid-September, end of wet season storm water samples do not present a worse case condition for source contaminant concentrations. An additional set of first flush storm water samples should be collected at the beginning of the wet season (early fall) to provide a more representative worst-case concentration of chemicals within the storm water.

2. Section 2.6, page 5, last sentence: This sentence indicates that the assessment of the catch basin sediment and storm water data collected in May through June 2010 will be provided in the Source Control Evaluation Report. Because the July 23, 2010 sampling results report has already been prepared, this current planning document should explain if there are plans to revise the existing SCE report, or present this assessment in an addendum to the February 2009 SCE report.

3. Section 3.1, page 5: There is no mention of sampling and analyses for total petroleum hydrocarbons (TPH). However the outline of DEQ requests, as presented in Section 2.2 and in Anchor's February 4, 2010 response to DEQ comments (page 17), there is clearly a stated need (data gap) on TPH concentrations in the groundwater and its relationship to reducing conditions that may be mobilizing dissolved arsenic. Therefore, a sampling plan should be presented under Section 3.1 that includes TPH samples analyzed for TPH gas, diesel, and residual range, which will allow for evaluation of this relationship and its groundwater pathway.

4. Section 3.1, page 5, third paragraph: The specific locations identified for the pore water samples collection "along the shoreline area where shallow groundwater discharges to the river" is not clearly defined and does not appear to be supported by proof of groundwater seepage, nor technical review of existing data. To minimize error in locating and sampling a deeper water flux not representative of shallow groundwater discharge, the planning document should review, summarize, and present the following supporting information:
   - A low tide, low river stage field reconnaissance identifying areas of shallow groundwater seeps along the shoreline transition zone.
   - Further characterization of the lithology separating the fill and alluvium zones and seasonal groundwater levels to accurately locate shallow groundwater sample locations in the transition zone. For example, cross sections in attached Figures 2 and 3, do not show lithology that defines the separation between the fill and alluvium, nor indicate what time of year (date) the groundwater level shown on the cross section represents.
   - The planning document should provide the basis (supporting evidence) for the shallow groundwater in the fill zone connecting with the stage of the Willamette River.
   - A review of seasonal stage and tide fluctuation relative to the proposed transition-zone water (TZW) sample locations.
   - A set of horizontal and vertical control coordinates (using GPS) for the field crew to use and to direct sampling activity to a specific location identified and supported by field reconnaissance, lithology review and seasonal river stage evaluation as recommended above.

5. Section 3.1, page 5, fourth paragraph: Construction diagrams of the pore water drive point samplers (shallow and deep) should be included in the work plan. This will provide clarity as to the construction, screen length and expected penetration depth

below mudline for the proposed sample devices as well as provide a visual guideline for the field crew installing the sampling device.

6. Section 3.1, page 6, third paragraph: All of the river water samples (shallow and deep) should be shown on the sample location map (Figure 1) by unique symbols and identifiers that cross-reference to Table 1. For example, TZW-A-4, TZW-B-2, TZW-B-4 and upstream sample locations are not shown on the map. In addition, because the background river samples are located in reference to the Tube Forging property, this property, and the sample locations need to be shown on Figure 1, or a supplementary map.

7. Section 3.1, page 6, last paragraph: It is unclear why only a minimum one-casing volume is allowed to be removed before sampling. Typical industry standard and EPA guidance for pre-sampling techniques require a minimum of three-casing volumes and/or a stabilization of measured field parameters. Please present an explanation for this deviation from standard practices.

8. Section 3.4: As stated previously for Section 3.1 (see Specific Comment #3), a groundwater sampling and analysis plan for TPH should be included in this work plan.

9. Section 4: The section is titled "Field Quality Assurance and Quality Control" (QA/QC) but the introduction text identifies that the laboratory QA/QC will also be included. However, this section does not meet the requirements for a quality assurance plan section and does not describe the quality performance requirements for the laboratory. The section should be revised to provide the substantive requirements identified in the references below:

    - US EPA 2001. EPA Requirements for Quality Assurance Project Plans, EPA QA/R-5, EPA/240/B-01/003, March 2001
    - US EPA 2006. Guidance on Systematic Planning Using the Data Quality Objectives Process, EPA QA/G-4 EPA/240/B-06/001, February

10. Section 4: This section should include information on required laboratory reporting limits to have specific analytical methods and reporting limits equivalent to applicable screening levels (when practicable) and consistent with previous results for more meaningful data comparison and analysis.

11. Section 4: This section should include a section for the analytical methods requirements that identifies the methods, holding time, sample preservation requirement, and container specifications.

12. Section 4: This section should include information identifying the data quality indicators, laboratory quality control, and performance requirements.

13. Section 6: This Work Plan document relies on and cites several documents that are not included in the Reference section. All documents, including DEQ comments and subsequent responses, relevant work plans and sampling results that are cited in this Work Plan should be included in the Reference section.

If you have any questions regarding this letter or would like to have further discussions regarding this site, please feel free to contact me at (206) 553-6705 or via email at koch.kristine@epa.gov.

Sincerely,

Kristine Koch
Remedial Project Manager
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